DOCUMENT RESUME

ED 296 075 CE 050 214

AUTHOR	Banks, John
TITLE	The World of Work as a Learning Resource. Working Document. European Community Action Programme. Transition of Young People from Education to Adult and Working Life.
INSTITUTION	IFAPLAN, Brussels (Belgium). Programme Information Office.
SPONS AGENCY	Commission of the European Communities, Brussels (Belgium).
REPORT NO	03WD86EN
PUB DATE	Dec 86
NOTE	50p.; For other reports in this series, see CE 050 115, CE 050 117, and CE 050 213-219.
PUB TYPE	Reports - Descriptive (141)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Cooperative Programs; *Demonstration Programs; Developed Nations; *Education Work Relationship; Foreign Countries; Institutional Cooperation; Postsecondary Education; Program Implementation; *Program Improvement; *Relevance (Education); *School Business Relationship; Secondary Education; *Work Experience Programs
IDENTIFIERS	*European Community

ABSTRACT

This report is one in a series on the work of the 30 pilot projects that form the European Community's second Programme on the Transition from Education to Adult and Working Life. Many of the projects in the Transition Programme are involved in developing or implementing work experience programs as a means of helping young people's personal, social, and vocational development. In doing so, they have had to face a number of curriculum and organization issues; five of these key issues are analyzed in this report: (1) How can work experience programs be made more effective?; (2) Is work experience for all students or only for some?; (3) How can work experience programs be integrated into the rest of the curriculum?; (4) How can liaison between schools and the world of work be established?; and (5) What help should teachers be offered to improve their knowledge of the world of work and to run successful work experience programs? The experiences of many of the pilot projects are synthesized in the report to provide answers to these questions, and a list of contacts for projects referred to in the text is appended. (KC)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED296075

EUROPEAN COMMUNITY

ACTION PROGRAMME

TRANSITION OF
YOUNG PEOPLE
FROM EDUCATION
TO ADULT AND WORKING LIFE

Working Document

PROGRAMME INFORMATION OFFICE
IFAPLAN BRUXELLES
SQUARE AMBIORIX 32 · B · 1040 BRUXELLES
TEL. 02 · 2307106

THE WORLD OF WORK AS A LEARNING RESOURCE

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☒ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

H Schmidt
IFAPLAN

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

BRUSSELS, DECEMBER 1986
DOC: 03WD86EN

CE 050 214

BEST COPY AVAILABLE

Contents

		Page
Preface		1
About this report		2
1.	The uses of work experience	4
	Definition	4
	Aims and methods	6
	Making work experience schemes more effective	8
	Assessing students' learning outcomes & the quality of schemes	13
2.	Is work experience suitable for all students?	16
3.	Integrating work experience into the curriculum	20
	Examples of integration	21
4.	Organising liaison between the school and the world of work	28
	Internal organisation	28
	Co-operation and partnership with the outside world	29
	Finding more placements	34
5.	Support for teachers	37
6.	Conclusions	40
Annexes		
A	Glossary	42
B	List of Transition pilot projects referred to in text.	45

Preface

This report is one in a series on the work and results of the 30 pilot projects in the European Community Action Programm on the Transition of young people from education to adult and working life.

The Programme is based on a Resolution of July 1982 by the Council and the Ministers of Education meeting within the Council. The projects, which are jointly financed by the Commission of the European Communities and national authorities, were set up in 1983 and will finish in 1987.

The main themes of the Programme, based on the Resolution, were:

- the development and use of work experience schemes in secondary education;
- the development of equal opportunities for girls and young women;
- the improvement of guidance and counselling and the development of youth information services;
- staff development programmes;
- the development of new forms of assessment and certification;
- the integration of young migrants;
- "education for enterprise";
- schools and social action; the prevention of illiteracy, drop-out, delinquency, drug abuse;
- the development of alternative curricula;
- co-operation and partnership in a local or regional context.

Further information on the Programme and other reports on it published on behalf of the Commission by IFAPLAN can be obtained by writing to the address shown on the cover.

About this report

Work experience is being more and more widely used as a means to help young people's personal, social and vocational development. Many different kinds of schemes can be found. They are used for pupils of differing ages; in different stages, and types, of education; and with different aims.

Most of the projects in the Transition Programme are involved in developing or implementing such schemes. In doing so, they have had to face a number of curriculum and organisation issues. This report deals with five key ones:

1. How can we make work experience schemes more effective? It is suggested that more attention needs to be paid to formulating clear aims: to the key components of a successful scheme: to using work experience in a phased or sequential approach: and assessing outcomes and quality.

2. Is work experience for all students or only for some? Generally, work experience is not offered to all students but only to those who are on more "practical" courses. The report reviews the arguments for offering it to all.

3. How can work experience schemes be integrated into the rest of the curriculum? Ways must be found to ensure that work experience complements and reinforces the existing processes of learning and development.

4. How can liaison between schools and the world of work be established? Good contacts with the world outside the school are a precondition for organising successful schemes. Transition pilot projects have used three distinctive approaches: twinning schemes; local liaison committees; and regional co-ordinating agencies.

5. What help should teachers be offered to improve their knowledge of the world of work and to run successful work experience schemes?

New demands on teachers concern better knowledge of the world of work, new attitudes and new skills. Part of the answer lies in offering them, too, work experience outside the school.

The report is a synthesis of pilot projects' answers to these questions as demonstrated in their activities over the past 3 years. It is offered as a contribution to planning, policy development and implementation, particularly at the regional/local level and in schools and training institutes.

1. The uses of work experience

There is now wide acceptance that offering young people experience of work can make a powerful contribution to their learning and development. But schemes of work experience vary considerably in their effectiveness, and the purpose of this chapter is to look at the different uses of work experience, and the key factors which, from the experience of the pilot projects, would seem to influence whether a scheme is as effective as it can be.

Definitions

In this report, the following definition of work experience has been used:

Box 1

> Work experience is any planned activity which forms part of an educational process, which introduces young people into a work environment in which they see and/or carry out tasks without taking on the full responsibility of a worker.

Work, of course, does not mean simply waged employment. Self-employment, working in a cooperative, and some forms of voluntary work, or work in the community, are all, nowadays, just as common forms of "work" as employment in a large firm. In this report, however, most of the examples are drawn from schemes which use placements in industry, commerce, agriculture and social services.

Work experience, in fact, is commonly understood to mean a placement in a firm. However the projects, and other initiatives, do show that

there are other means (than placements) which can be used successfully to give young people an introduction, of some kind, to the world of work. In Member countries, all of the following can be found in use:

Possible elements of work experience schemes — Box 2

in-school	out-of-school
1. lecture/guest speaker	7. work exploration centre, off-site training workshop
2. school-industry conference	8. use of industrial facilities
3. role-playing game	9. visit/guided tour
4. simulated business game	10. observation; work-shadowing;
5. mini-enterprise	11. placements in a work-situation
6. industrial projects	

See Glossary annexed, on some of these terms.

All of these can be used independently, for different purposes - on which see Aims and methods, in the following section. Their value can be increased by using them together, for instance:

- in-school lectures/conferences and out-of-school visits/guides are useful part of preparation or introduction to a work experience placement;

- role-play/simulation games/mini-enterprises may be important substitutes in (e.g.) rural areas where an industry/commerce/service sector is not available to provide placements. They may also have practical advantages such as being more easily structured, and offering more scope for controlling the learning environment compared with placements and other out-of-school situations.

Indeed, one of the conclusions in this report is that they should be used together, in a sequential approach.

Aims and methods

To prepare young people for working life the world of work is, itself, a ready-made resource. It provides a special learning environment which is complementary to the school-world and which cannot be offered in a classroom in that:

- in work, as compared with school, a student is expected to be more independent, and to take greater responsibility for his/her activities;

- relations with other people, in the work-place, are more adult-like;

- at least as seen through the eyes of a student, work has a higher status than school;

- work is both an economic and social activity.

All work experience schemes build, to a higher or lesser degree, on these characteristics. Aims and methods, however, can vary considerably.

The different types of aims include:

- **to develop vocational knowledge, skills and attitudes, and enhance motivation.** The best-known kind of work experience is that used in a vocational training course, where practical work and the learning of practical skills complements and reinforces students' learning of theoretical knowledge and skills. Industrial work experience placements are the most common; but schools may also use projects worked out by firms, and simulations. Guided tours and lectures by visitors may also play a part, especially where raising students' motivation is one of the aims. Simulations have several advantages: they can be closely focussed on key learning objectives, and reflect the key aspects of reality (e.g. decision-taking under time pressure). At the same time they can protect students from the results of their mistakes, and can be re-staged to repeat selected learning experiences.

Pre-vocational courses, aimed, more broadly, at giving students some insight into the process of production and skills of a generic kind, are a half-way house between this type of vocational work experience and that used to give a general guidance-linked introduction to the world of work. Pre-vocational courses tend to use simulated work situations, often outside the school.

- **to support vocational and educational guidance.** It has become more and more difficult for young people to visualise what work, and the work situation really mean. A lot of work has become invisible and inaccessible. A major use of work experience is therefore to provide an opportunity - in a particular vocational field or, better, in different professional contexts - to see, and feel, what work is like, and what the work-place can be like. Visits and placements, are used; and even simulation games, and guest speakers, can do this. The general pattern is to start with an introduction to the world of work in general, and to move on to more specific information about a particular career.

- **to enhance personal and social development, especially communication skills.** Work situations provide the natural soil in which to help young people develop skills such as being able to communicate well, cooperate with others, take initiative, show respect for others and to integrate into, and participate in, a group. These qualities cannot be acquired by any other means except indirectly, as part of some activity. Unlike many traditional class-situations, the conditions of real, or simulated, work provide students with the right kind of opportunities to develop them.

- **to provide part of social education.** Opportunities to see people at work, their conditions of work, and the social and economic values reflected in different kinds of work-place, are valuable, quite separately from the guidance value of the experience. An appreciation of the type of work carried out in the social services, or the caring professions, is important for a student who intends to take his or her place in industry or commerce, and vice versa. Visits and work-observation or work-shadowing are most relevant here.

- to remotivate and reintegrate young drop-outs from school. Loss of self-confidence, self-esteem and motivation are often the results of failure in school. Many projects and schemes, aimed at attracting them back into the education/training process, use work experience in one form or another. In some, they are given the opportunity to work in small groups, perhaps in a production cooperative, or in the community, and made responsible for planning or carrying out activities, the successful completion of which will give them encouragement and confidence. The underlying aim is to provide them with an experience which will show the relevance and value of social or vocational skills, and so restore their motivation to take part again in some form of education and training.

Offering work experience schemes to achieve these objectives can at the same time contribute to fulfilling many of the broader aims of education for adult life. It is therefore essential to use the full spectrum of methods, and combinations of them, which are appropriate in each particular context.

Making work experience schemes more effective

Evidence from the pilot projects highlights four particular factors which are important for making work experience schemes more effective: defining clear objectives; matching the organisation clearly to these objectives; using a phased, or sequential, approach; and assessing quality and outcomes.

Clear definition of objectives.

The choice of objectives, from among those described in the previous section, depends on the context (vocational training; general pre-vocational course; guidance programme, etc.) and the age of the students. Because of the current interest in using work experience more widely, and to some extent the political pressure on schools to develop schemes, the need to define clearly what objective is in view for a particular scheme, should be stressed:

- clear objectives help to determine what activities a student should be involved in during a placement, e.g. should the emphasis be on breadth, to obtain a general knowledge of the various aspects of the activity, or on depth, concentrating on specific skills?

- clear objectives make it easier to set up a suitable monitoring arrangement. If that is done, teachers, and even more so industrial tutors, will be better able to detect those moments during the placement in which the student needs extra help, e.g. when it becomes evident that some particular skill, whether personal, or vocational, is lacking, or when a move is to be made from one objective to another, e.g. from a general interest field to a more narrow one.

- clear objectives will make it easier to assess results, in terms of individual learning or other benefits. Everybody involved will be able to apply the same criteria, to assess what progress a student has made.

All involved in a work experience scheme (teachers, tutors, students, etc.) must therefore be aware of its particular aims, and of the specific organisational arrangements needed.

Matching organisation to objectives.

There is no space in a report of this kind to go into detail of how to get the best out of all the types of activity listed in Box 2. In general, experience points to the importance of three stages:

- a preparation phase;
- the activity (work-site, or other);
- the follow-up.

For work placements, the most widespread and important form of work experience, Box 3 analyses the key factors for success in each stage.

How to help students gain more from a work placement — Box 3

- Preparation

Students will gain more from a placement when they:

- have been prepared for it in a number of subjects so that different aspects of the experience can be seen;
- have been introduced to the idea of learning independently;
- have developed their personal and social skills so that they are confident about talking to employees/superiors in the placement
- have a basic knowledge of the relevant theoretical subject matter (in vocational training schemes).

- The worksite

Students should:
- work in the presence of the industrial tutor, to enable the tutor to assess the student's capacities, to monitor the learning process and to act as a role model for the student;
- receive feedback about their activities to help direct their learning;
- talk with several people working in the firm (important for the guidance process and the development of social and communications skills);
- be allowed to see/do a variety of activities (if the aim is guidance); or
- be allowed to concentrate on some specific skills or competencies (for vocational training).

- Follow-up

Students should take part in individual and/or small-group follow-up activities; individualised follow-up activities are often best, particularly if single and not group placement has been used.

Using a phased, or sequential, approach

A number of pilot projects have shown the benefits of using different kinds of work experience, in small amounts, at intervals over several years of a student's secondary-school life. There are two main reasons why such an approach is seen to be productive.

The first is that, apart from the reinforcement of specific vocational training, the aims attributed to work experience schemes are not ones that are achieved quickly or solely as the result of work experience; developing a better understanding of the the nature of work, or of the workplace, is a complex process, which comes about gradually. Similarly, in the example of the Irish project quoted in Box 4, the step-by-step approach to developing "enterprise" amongst students, uses the outcome of the preceding learning phase as the starting point for the next one. Work experience, or simulated work experience, is an element in each.

Secondly, most students find it very confusing to step from the structured learning situation of the classroom into the unstructured situation of the work-place, where they are, for the most part, expected to act as independent adults. A gradual introduction to the world of the work-place makes this transfer from one world to the other easier. In doing so, it is likely to enhance the value of the work experience for learning. For whereas in a typical classroom situation the learning process is guided by the teacher, who tells the students what is important, what they must learn, and checks afterwards how much they have learnt, in the work situation the student may well not have anyone in this role.

For this reason, group-visits to firms, or visiting lecturers, may be helpful. For even though they lack the directness of impact which is provided by a visit to the work-place itself, they have the advantage that they can be structured so that all the students see/hear the same thing. Simulations and mini-enterprises have similar advantages: in theory, students have different experiences but the process can be controlled, to provide clarifications, repetitions of difficult points, etc. and prepare the ground more thoroughly for students' exposure to the "real" work-situation.

The advantage of a phased approach can help students to move gradually in the direction of more independent learning. Studies have shown that

the pre-placement ability of the student to learn in a non-school situation is one of the best predictors of the value of a work-placement. The Italian project example in Box 4 illustrates an approach to increase this capacity, in a scheme which leads up to a one-week placement in its third year.

Sequential work experience schemes — Box 4

An Italian project experimented with a series of schemes in training institutes.
In one school, banking was the central theme. In year 1, students visited firms to find out what use they made of banks' services. A simulation of these services was played in year 2. In year 3 the students had a one-week placement in a bank.
In other schools, students took part in a series of simulation games in which relations between production, wholesale and retail firms and banks were simulated. The complexity of the relations studied were increased each year. In this way students were gradually introduced to aspects of national and international trading, in ways which called for independent learning.

An Irish project has developed a 3-unit "Enterprise Development" course. The aim of the first module is to develop skills such as brain storming techniques, creativity, self-assessment capacities, and social skills by means of games, group discussions and special exercises.
In the second unit students visit and study local firms of different kinds, to learn what small firms are like and to find out about their premises, personnel, capital, equipment, materials, finance, and marketing.
The principal activity in the third unit is to organise and run, either individually or in a small group, a small-scale enterprise, e.g. to write a tourist guide or to manufacture a product, e.g. children's swings.

Sources: Galway (IRL 17); Val d'Elsa (I 20a).*

* for addresses of pilot projects mentioned see list at end of paper.

Assessing students' learning outcomes and the quality of schemes

Assessment is important because it obliges the organisers of schemes to define their aims, and it gives feedback to students on their progress, as well as making it possible, in theory at least, to take it into account in certification.

However, assessment in work experience schemes is difficult, because:

- the aims of most work experience schemes, e.g. seeing the world of work, helping young people think about their future career, or stimulating their personal development, are difficult to express in operational terms;

- assessment procedures have not been developed, e.g. to assess personal and social competencies;

- the choice of assessors is a further problem: should they be the teachers, as they are responsible for the organisation of the schemes? the industrial tutors, as they work directly with the students? the students themselves, as it is "their" learning process? or a combination of these groups?

Assessing students' learning outcomes

In a previous section the various aims of work experience schemes were set out. The French pilot project (F 9) was particularly concerned with one of them: it set out to analyse the contribution which work placements, forming part of the vocational training course for students from 'Lycées professionels' (vocational schools), could make to the personal and social development of young people.

In order to do so, the project developed a profile, or written record of the skills, achievements and experiences of a student. This invol-

ved, to start with, the translation of descriptions of general competencies into statements of observable behaviour: some examples are given here:

Personal and social development: competences — Box 5

1. Has mastered the use of appropriate linguistic codes, systems and registers, e.g. by adapting his/her speech and attitude to the person addressed and the context.

2. Ability to take part in a group e.g. by
   - listening to others
   - relating to others, being accepted by them
   - coping with different people, and points of view.

3. Ability to take part in group activities and play a positive role e.g.:
   - communicating and passing on information
   - organising a task and sharing out activities
   - negotiating a solution to a problem, and putting it into effect.

- From a list of Competencies used in the French (F 9) pilot project, for use by industrial tutors during a placement and by teachers on students' return to school.

The problem still remained of how consistently different assessors judged students' performance against the levels indicated, and how consistently users of the profile would interpret it.

One approach to overcome this was to use more than one assessor. Assessments from teachers were balanced by those from students and sometimes industrial tutors. Having several assessments can be helpful. Research elsewhere shows that the opinions of these three groups often differ considerably. But it also suggests that when they discuss their assessments, they will gradually come to a common view.

As regards certification, Irish and UK pilot projects, as part of the national development work in new assessment and certification procedures, recorded students' participation in work experience, as in residential experience and other forms of practical learning, in various ways. These included Personal Records of Achievement (UK) and newly developed Certificates (Ireland).*

Assessing the quality of work experience schemes

An interesting result of the assessment work of the French (F 9) project was that it stimulated discussion between staff about the relevance of the curriculum. As a result of both visiting the students while on placement and remarks made by them afterwards, subject teachers became more aware of discrepancies between what students experienced in firms and what was taught in the school. This stimulated discussion in school and with tutors on how the curriculum and the placements could be improved in order to enhance their educational value.

This points to the conclusion that the more work experience schemes are integrated in the curriculum, the more it becomes necessary to assess their quality, in the sense of their contribution to the educational goals of the school generally. This will become increasingly important as work experience schemes become more widely used.

---

* Further discussion of this can be found in:"Assessment and Certification, issues arising in the pilot projects"; IFAPLAN, Brussels, 1986.

2. Is work experience suitable for all students?

National practice in providing opportunities for work experience to students as part of compulsory education varies greatly within the European Community. The picture is made more complex by differences in secondary education structure. It is relevant to ask whether the pilot projects' experience suggests that such opportunity should, or should not, be offered to all students as part of their compulsory schooling.

At present, Denmark comes closest to doing so. All Danish students have at least one work placement period as part of their vocational guidance programme in the last years of general compulsory education. Each year about 120,000 students take part.

In Germany and Luxemburg, countries with a selective system of secondary education, work placements are included in the guidance programme for the academically less-able pupils. Some other countries, the Netherlands, for instance, and Greece, do not include work experience in any part of the curriculum. The trend, however, in a number of countries, in particular Germany, France, Ireland and the United Kingdom, is to offer work experience opportunities to more pupils, even though in most cases this means, so far, only the less-academically-inclined ones. The majority of students therefore, across Europe as a whole, are not given the opportunity of work experience.

What arguments are there in favour of, or against, a policy which would make this possible, whether as part of a guidance programme, or as part of general/pre-vocational education courses? Would it be worth reserving time from the curriculum to give even the most academic students an opportunity to learn about the world of work which, in various ways, they are preparing themselves for?

None of the pilot projects addressed themselves specifically to this question, but the points which follow, drawn from the projects' experience, are relevant:

- all students need to have a general knowledge of the world of work. In only the last few years, the rapidly changing structure of industry, and commerce, and the emergence of new types of business organisations based on the new technologies, have made it extremely difficult for anyone, let alone young people, to feel that they are familiar with the nature of modern "work". Large numbers of types of jobs, let alone the jobs themselves, have disappeared, or are in the process of disappearing. Work experience schemes themselves are not likely to be able to remedy this difficulty; but they can play a part, in various ways, in bringing the question of the nature of work now, and in the future, in front of young people.

- work experience has a strong personal development value. Clearly there needs to be even more attention paid to proper preparation, monitoring, and follow-up, when the aims of a scheme are being widened to accommodate a wider range of pupils. But the ability to learn in a non-school situation - the quality which both helps young people to benefit from a work experience placement, and which they develop in the course of it - is not limited to any particular group or type of pupil; such experience will benefit those who intend to continue in general education, and follow a university course, as much as anyone else.

- the need to pay more attention to developing "enterprise" and understanding of the economy, among all pupils, can be helped by work experience. The various types of simulated work experience, particularly oriented towards these objectives, have been mentioned earlier. It seems likely that, in a world in which a shortage of jobs is inevitable in the foreseeable future, the responsibility for creating jobs will fall more on the better qualified and abler pupil. In that context, interest in, and some knowledge of, the world of entrepreneurial activity should be developed amongst students of all levels of secondary education - whether by studying firms themselves directly, or through simulation schemes such as an "Enterprise Development" course (Box 4).

- finally, many students do not complete the courses they begin on entering upper-secondary education or training. In some countries, as many as 50% drop out at that stage. Those who do so from academic/ theoretical courses face considerable adjustment problems, and it can only be helpful for them to have had some first-hand personal experience, however brief, of the world of work and vocational training, as part of their compulsory schooling, which otherwise has probably been strongly oriented towards theoretical, university-style, learning.

How these needs should be met is a matter for national and local consideration. The idea of including something so practical, but so time consuming, as work experience in the general education programme of the more theoretically oriented pupil will in many cases attract criticism. Outcomes from the pilot projects do not suggest that there is any one standard policy answer which is generally applicable. But the variety of forms of work experience discussed in this paper illustrate the scope for many different solutions.

In this connection, attention should be drawn to two current developments which are relevant and helpful. The first is the "Young Enterprise" movement* being actively developed especially for more able pupils in the United Kingdom, covering many different kinds of education for enterprise courses and activities. The other is the introduction of a new form of work experience known as "work shadowing".

In work shadowing, the student follows the worker around, for the period of the placement, observing the tasks in which s/he engages within the context of the job role. A student is helped, in this way, to get at some of the "why" issues, and not just to see the "what" and "how" aspects of the job. The focus is put on understanding the role of a worker, rather than just the processes or tasks. As a result, though

---

* See "Education for Enterprise"; an interim report, IFAPLAN, Brussels, 1986.

observation is a main part of the scheme, interaction, in the sense of talking to the worker being shadowed and others with whom the worker is in contact, and participation, in the sense of helping with tasks, will be expected of the student.

Work shadowing — Box 6

- Work shadowing can be used in careers guidance for more academic students. Students have shadowed lawyers, doctors, industrial managers, and even a junior minister.
- Work shadowing can be used to support gender equality. Following a successful scheme in which six upper-secondary girls shadowed six top women executives for a week, a shadowing scheme was launched in the U.K. to publicise the concept and to provide schools with the names of executives prepared to participate. Providing young women with positive role models can help them to visualise themselves better in careers in management and industry.
- Work shadowing is also used in the preparation phase of business simulations or mini-enterprise schemes. Students can learn, through shadowing, the roles they are going to play in the simulations.

3. Integrating work experience into the curriculum

There are obviously compelling arguments why work experience, as a form of learning, should be integrated into the other learning experiences provided by the school; "integrated" in the sense that links are built deliberately between what happens in the work experience situation and the activities which take place as part of "subjects" or other courses in the school. A first step towards this aim would be to compare and link the objectives of a work experience scheme with the objectives in different subject areas.

The processes by which projects have moved in this direction are difficult to describe in general terms, because of the importance of the context, and the precise mixture of aims, in each case. It is necessary to rely more on quoting significant examples, and a number of these appear at the end of this section. But some analysis may be helpful, in order to understand their significance.

The full benefit is only gained from a placement, and other types of work experience, when links are deliberately built in, and the connections made, between the student's experience in the world outside the school and his/her learning in the classroom. In such cases the "benefits" can apply in both ways in support of, the teaching of specific subjects and the quality of the work experience scheme itself.

In terms of subjects, links may be made between work experience and any subject, and it is a feature of some schemes to try to ensure that as many subject-teachers as possible are involved, in the preparation phase at least and preferably in the follow-up phase also.

Integration raises many practical questions. Apart from the need for staff development opportunities, of the kind discussed in part 5 of this paper, the pilot projects' experience indicates that the main difficulties lie in the following:

- time-tabling: work experience does not fit easily into school systems which do not allow schools a fair degree of control over their curriculum, especially the timetable; the need to be able to rearrange the timetable so as to meet special requirements of different kinds may stand in the way of the integration of work experience into particular subjects. A second-best solution, adopted in some projects (e.g. Italy) has been for schools to organise work experience activities as extra-curricular offerings, taking place in the afternoons after school has finished, or (e.g. in the UK) including them in non-examination subjects.

- curriculum content: the content of upper-secondary general/ scientific education courses may make it difficult to connect work experience with the content of the course, which was not considered when it was drawn up.

- co-ordination: finding time to bring teachers together to plan the use and exploitation of work experience is an important requirement. The value, as well as the difficulty, of doing this has been emphasised in a number of pilot projects. Similarly the difficulty of releasing teachers, during term time, for work experience courses for themselves, or to supervise their own students attending work experience placements, are recurring problems.

Examples of integration

Vocational training courses.

There is a considerable history of the use of work experience in support of vocational training courses, for instance in Belgium, Denmark, France, Italy and the Netherlands. The need for practical experience to reinforce and strengthen motivation for theoretical learning is clear enough, even if not always easy to co-ordinate and practice. In one of the French pilot projects (F 9), however, teachers in a number of 'Lycées professionnels' (vocational schools) were invited to consider, and try to increase, the personal and social education benefits

derived by their pupils from their work experience placements. The project schools tried to make it possible for all the subject-teachers of the students going on placements to visit them, in their firms, during the placement, so as to be able to relate their subject teaching to their students' experience more directly afterwards. The project confirmed that the teachers agreed that work experience was of value in this respect for the pupils, and provided encouraging evidence of the desirablity of associating more subject-teachers with the preparation for, and exploitation of, work experience in the schools.

Integration in vocational training — Box 7

In pilot projects in Modena (I 22a) and Val d'Elsa (I 20a) industrial staff visited schools to discuss the practical application of theoretical principles. Students visited laboratories, to work with special equipment which the school itself did not possess, after special preparation lessons in school about it.

Students also play simulation games, in which the relations between production, wholesale and retail firms, and banks, are simulated.

In the Flanders project (B 2) vocational schools co-ordinated their course work with the practical learning provided in firms, as part of 'alternance' technical vocational courses.

Guidance.

The integration of work experience into guidance courses can be done in a number of ways: as part of a separate subject (Arbeitslehrer, Box 8; the Aalborg guidance course, Box 9); as part of another subject (e.g. contemporary studies, Box 10); and to support a range of subjects across the curriculum (Rijnmond, Box 11).

One of the Danish projects (Aalborg, DK 3), illustrated how a phased, sequential, scheme of work experience could be used in a guidance course, complemented by other, related activities such as the use of guest-speakers, simulation games, periods in an off-site training workshop and visits to firms and services in the local community.

"Arbeitslehre' (understanding of the working world) Box 8

'Arbeitslehre' is provided in Germany in different ways:

- aims:
  - general introduction to working life;
  - careers information, i.e. about vocational and educational choices;
  - introduction to home economics, budgeting, role of consumer.

- content and organisation: it covers home economics, economics/social studies, technology/craft work and guidance/careers education as a separate subject, a cross-curricular activity, or as part of existing subjects;

- duration: the last 3 years (classes 7-9), or the last 4 years (classes 7-10), of compulsory education.

- type of schools:
  - it is usually part of the Hauptschule and Gesamtschule (comprehensive) curriculum;
  - sometimes also in Realschule and Gymnasium, often as part of economics or other subjects.

- sequential approach: in principle many work experience elements are included:
  - lectures, role-playing games; mini-enterprises with emphasis on technology, less on selling; visits to firms; placements.

- organisational structure of placements:
  - usually 2 to 3 weeks,
  - sometimes 1 day a week for a longer period in firms, offices, public services, hospitals, etc.

Typical 'Arbeitslehre' Programme

Year 7 (age 12-13) "Produce something for yourself"
- role of consumer,
- economics and technological issues of mechanisation of the home,
- designing, producing and marketing of products,
- household budgeting.

Year 8 (age 13-14) "Produce for others"
- simulation of a production process in school workshop;
- study-units to firms;
- discussions with Trade Unions and employers;
- division of labour and automatisation.

Year 9 (age 14-15) "Production for the mass-market"
- structure of an organisation, technical/economic/social aspects;
- placement for guidance purposes: preparation over 6 weeks, a 2-3 week placement; follow-up over 2 weeks.

Integration of work experience both into such a guidance course, and into teaching in other subjects, is much helped in Denmark by the fact that guidance is taught by the class-teacher in the Folkeskole (lower-secondary school) and that the same teacher will almost certainly be teaching both Danish and contemporary studies, and perhaps as much as 60-70% of the total curriculum, for the same group of students.

The Aalborg guidance course (DK 3) Box 9

Work experience is included as part of the guidance course for all pupils in their last 2 years of compulsory education.

A short (one-week) visit to a firm is included in their 8th year (i.e. age 14/15) to give students a general idea about the world of work. In the 9th year (age 15/16) students have a two week placement in a career area of their choice, to help them to check whether they are happy with their choice and also to gain experience of the nature of the work place. This is then discussed in class. In the next year which is followed by most pupils except those going on to university, another two-week placement is offered, mainly to confirm the vocational choice made, and to introduce students to specific vocational training in their chosen field.

Work experience as part of "Contemporary studies" Box 10

Work experience is designed to contribute not only to guidance but also to the subject "contemporary studies" (both taught by the same teacher) in schools in the project in Hvidovre, Denmark (DK 4).

Pupil material, in the form of short papers (Mini-Reports) have been developed as part of the project, for the use of both teachers and students, dealing with particular types of placement, e.g. shop worker, farm employee, etc.

The Mini-Report on being a shop worker contains discussion material on the role of the consumer in modern society, as well as preparatory information and advice about the placement. Similarly, the material to prepare students for a placement on a farm suggests a variety of questions which could be used in an interview with farmers in the neighbourhood, to extend knowledge of geography and economics as part of contemporary studies.

Similar, though less wide-spread, arrangements exist in some Italian schools, whereby firms offer "taster" work experience placements for a short time during the summer months, and, during term time in the winter months, longer, more narrowly focussed, placements, for students on vocational training courses. The Biella project (I 22b) extended and developed this system, enlarging the number of firms providing such opportunities (in an area in which there is little or no formal guidance provision as part of secondary education) and encouraging closer co-operation between firms and schools over the use of the longer placements, in the winter months, for vocational training purposes.

In countries such as the United Kingdom, which do not have a developed pattern of work experience as part of compulsory schooling, and where the tradition of providing careers education in the curriculum is much weaker, the result of reviewing transition courses, and developing them, may well be to strengthen guidance teaching and to begin to introduce some elements of a work experience scheme, and placements also.

"Across the curriculum" Box 11

In the Rijnmond project (NL 25) schools, one subject, often social studies, plays a central, organising role in using work experience as part of a guidance course. In the 8 weeks "preparation phase" as many other subjects as possible are asked to take part: economics, to discuss the roles of firms; history, to discuss the history of trade unions; mother-tongue, to decide how to write up or report on the activities, etc.

The project is preparing a special handbook on how subjects have been involved in the programme.

Re-motivation

The particular use of work experience not so much to guide, as to remotivate, young people, especially those who have dropped-out, or who are likely to drop-out of, school, can be illustrated from the Dublin project (IRL 16).

Remotivation: the Dublin "out-centre" Box 12

The Dublin project (IRL 16) set up a so-called "Out-centre" in a local primary school. It consists of a "home area" (kitchen/dining/living area), a light craft/hobby/group-work room and a small tutorial room. In it courses for unqualified young unemployed school-leavers (age 15+) were organised. The number of participants varied between 10 and 19. The courses lasted 30 weeks.

Usually a course had 3 phases:

- the development of self-confidence and community involvement through activities such as creative drama, outdoor pursuits and craftwork;
- more awareness of the local environment and taking on more responsibility;
- investigation of possible job openings and preparation for further skills training.

In the last two phases students have work experience in, e.g. local firms, a community centre, meals-on-wheels service, etc.

Most of the (80) students benefited not only in terms of self-confidence and enjoyment; they also developed new future-oriented plans. After the course some found jobs, others were placed in vocational training courses; a third group worked as volunteers in community projects.

The same approach or philosophy, though in different circumstances and on a considerably larger scale, has been followed in the "Production Schools" set up in Denmark since 1976.

The key characteristics of both can be summarised as:

- providing an off-site, non-school, learning context;
- providing a warm, supportive, environment;
- providing a work-style setting, but one which could be interrupted so as to follow learning needs, for individuals, or the group, wherever necessary;
- a learning context, and teaching style, designed to build confidence, provide personal and social education, and lead on to a regular vocational training course.

Remotivation: the Danish "Production Schools" Box 13

Production Schools were set up to help young people who have left school early, with few or no qualifications, and are unemployed. The main aim is to remotivate and to help them enter (or re-enter) vocational training and obtain a qualification.

In 1986 there were 63 schools providing over 1800 places. Students are between 16 (i.e. the end of compulsory education) and 25; about 70% are between 16 & 19. About 2/3rds of the participants are women.

Courses last up to a year. They consist, broadly, of 3 parts:

Production work
Involving students in production processes, chosen by them, and making them responsible for the quality of the output is an essential part of the Production School philosophy. Production is in agriculture, textiles, fish-farming, manufacture of solar panels and wooden toys, household and catering services, etc. The quality of the product is more important than quantity; all products are sold. Students work 50% of the time in in-school workshops.
The choice of product is made by students and teachers, in consultation with employers organisations, trade unions and local MSC representatives, in order to avoid unfair competition.

Training and education
Training is directly related to the production process, i.e. students are trained in the use of materials, tools and machines. When students feel that they lack basic knowledge, they are often motivated to take part in elective subjects such as arithmetic, accounting, Danish, etc.

Guidance
Students are informed about the labour market, social benefits, and training and education oppotunities individually, in group sessions and through visits, etc. Students who have found a job are allowed to leave the school.

Students receive a small allowance, but at a level well below unemployment benefit. The Department of Education, which approves the curriculum, pays 50% of the schools' costs, the local municipality the other half.

4. Organising liaison between the school and the world of work

The introduction of work experience schemes puts new strains on the organisation and management of schools, and throws up quite new problems for those that have not hitherto used contacts with their local community for such purposes. In chapter two some of the curriculum issues were examined; in this chapter the focus is on the organisation implications inside the school, and the management of contacts with firms and other placement-providers outside it. The Transition pilot projects have produced a great deal of evidence on both these aspects.

Internal organisation

Introducing a work experience scheme, whether small or large in scale, will have an impact in three areas:

- resources; compared with classroom teaching, almost all work experience schemes need something extra such as equipment, space, money, or an office, preferably with a telephone.

- suitable staff and staff time; teachers and/or other staff will be responsible for initiating and maintaining contact with firms and other institutions outside. They need also to be able to prepare, monitor and follow up the experiences of students in work placements. Finding the necessary time, and keeping the organisational "tail" of a scheme to a minimum, is a major consideration.

- timetable time; most work experience schemes do not fit into the usual timetable structure based on one-hour lessons. Some rearrangement of the timetable to create e.g. four-hour time-slots is likely to be needed.

Factors which are important in reaching solutions which work, appear from the experience of the projects to be as follows:

- Status; like any other innovation in an institution, work experience will be easier to initiate, and run smoothly, if it is seen to carry the authority and approval of the head of the school or institution.

- Administrative support from outside the school, for instance on preparing the proper arrangements for the insurance of teachers and students, and the provision of resources, is essential. In some countries, the need for official permission to include a work experience scheme in a student's course, will also be needed.

- The appointment of a member of staff, within the school, to carry special responsibility for work experience schemes, has been shown to be very valuable. Preferably it should be somebody of senior level who has sufficient time to invest in the scheme, and the status to persuade others to take part in it. The role should be seen in terms of:

- establishing structures inside the school which are needed to run the scheme;

- identifying the in-service training implications, and finding out how to meet them; and

- building up a network of contacts with firms, institutions, groups and individuals in the community.

Co-operation and partnership with the outside world; three approaches

Developing work experience schemes, of whatever kind and purpose, is one of the main ways in which schools in Transition pilot projects have developed co-operative links with firms and organisations in

their local community. In fact, for many of the project teams, this is the main dimension in which schools and their local communities are working together. Whether a work experience scheme consists of providing placements for students in firms and service organisations, or bringing the world of work into the school in some way, there is a clear need to develop close working relationships, with outside organisations, of a continuing character. For many schools this is an entirely new activity.

There are so many different ways in which this can be done that there is not space here to describe them all. But three approaches in particular will be briefly described, because they seem to have wide applicability, in meeting the needs of rather different situations.

1. Twinning schemes

Twinning agreements, whether formal or otherwise, are a common feature in France following an initiative in 1984; and also in Denmark. In France, a central-government initiative to promote twinning resulted, within the first year, in 8000 agreements, covering 60% of the 'Lycées professionnels' (vocational schools), 50% of the 'Lycées techniques et généraux' (technical education and general education), and 25% of the 'collèges' (comprehensive lower-secondary schools).

Twinning schemes in France: aims — Box 14

Partners should collaborate in such a way as to:

- increase their mutual knowledge, understanding and respect;
- promote the participation of the firm & its technical staff, in the educational programme of the school; and school staff visits to the firm;
- help students and teachers to have access to modern equipment/processes;
- provide work experience places and courses in the firms; and facilitate the development of practical work for pupils, to reinforce/extend their theory work in school.

Under these headings, twinning agreements can clearly lead to a variety of activities, ranging from student visits, staff from the firm visiting the schools, work experience placements for both students and teachers, and joint development projects. A small evaluation study in one area showed that twinning had led to much improved contact, and better mutual understanding. But among the problems still to be solved, were:

- finding time for teachers and industrialists to meet;
- co-operation being upset by economic difficulties in firms; and
- uncertainty as to what kind of co-operative activity would best suit the needs of "academic" students (i.e. those in the 'Lycée général').

2. Local liaison committees

This kind of structure is found in pilot projects both in Denmark and Ireland. Its aims are not different in any important way from those of a twinning agreement, i.e. they are broad, flexible and capable of adjustment to meet the local situation. Liaison committees, or groups, seem to work best where a group of schools, and a groups of firms identify common interests and are conveniently situated geographically to be able to work together. This may apply in rural areas or relatively self-contained urban areas. The basic feature of the organisation is that the schools and firms concerned in the area are represented in the liaison committee, and devise whatever co-operation they wish (see Box 15 for an example from Ireland).

A local school-industry liaison committee — Box 15

In 1981 a county-level School-Industry Liaison Group was established to develop and support five local liaison groups. The local groups were set up to establish systematic co-operation between schools and community in order to help young people to move from school to working life and from teenage dependence to adult maturity.

The local groups bring together representatives of industry, the church, parents, students, and local agencies such as development agencies, manpower services, and training institutes. Activities provided include:

- factory visits for students and teachers;
- experts visiting schools to demonstrate the practical use of certain subjects and to serve as advisers for mini-enterprises;
- practical work experience for students;
- examining the possibility of joint action in job creation, and self-employment initiatives;
- raising funds for a computer network;
- organising career guidance activities.

The liaison groups have led to effective co-operation, the avoidance of misunderstanding and duplication and, most important, better communication.

Source: Munster/Shannon project (IRL 18)

3. Regional co-ordinating agencies

Co-ordinating agencies, of a regional or local kind, are being tried out in a number of pilot projects in different countries ranging from the Netherlands to Germany, Belgium and Italy. They grow out of the need for a two-level organisation which can bring together representatives of schools, employers' organisations, trade unions and others, in a management board; and execute, through a small office, various linking schemes, such as work experience provision.

Some of these agencies have a rather wider role than the structures described so far, in the sense that they may provide information, carry out co-ordinating functions, or even develop new schemes - all aimed to promote contact and co-operation between the different sectors.

In the Netherlands, it is government policy to establish an agency in each of the 12 provinces ('Contactcentrum Onderwijs Arbeid' - Centres to promote School-Industry Links), and two of these have taken part as pilot projects in the Transition Programme. Some of the lessons learnt by them are now being transfered to the other provincial centres in the country.

Other examples of this kind of agency occur in Italy (the 'Agenzia Scuola Lavoro', school-work agency in Modena), and in Belgium ('Transvia', a newly-formed autonomous body in St. Ghislain, connected to the pilot project there). In France, the work of the major pilot project (F 11) on the development of the CIOs ('Centres d'information et d'orientation' - guidance centres) includes amongst its themes the possibility of the centres being used in an intermediary role between school and industry, to assist in ways similar to the Dutch centres; and in Germany the Transition pilot project in Kassel is concerned with co-ordinating the supply and use of work experience places, in the context of the guidance programmes in the schools.

Regional co-ordinating agencies: typical activities — Box 16

Information
- publication of a booklet to give firms up-to-date facts about the local educational system;
- publication of a folder containing information about all the courses available in the region, which include work experience;
- distribution of information material to students about post-compulsory training and education opportunities.

Linking
- school-based mini-enterprises and local experts available and willing to help them;
- firms offering work experience places and schools needing them;
- schools and community-based projects offering work experience possibilities.

Organisation
- of work experience schemes for students during the summer holidays;
- of work experience schemes for teachers.

Sources: Kassel (D 7); Zeeland (NL 24); Rijnmond (NL 25); Modena (I 22a).

One aspect of these agencies which has been of concern in the Programme, and of which there has so far been only modest positive experience is the participation of trade union representatives in them. Clearly it is highly desirable that local trade union representatives should take part, and as actively as possible. But while employers, on behalf of firms, can provide work experience opportunities, this is not the case, except to a very limited extent, with trade unions. Moreover, while the headquarters-offices of trade unions, at the national level, have a planning and development capacity, this is often not the case at the local or regional level, so that there is a shortage of staff who are informed and concerned with the development of new approaches, training procedures, etc. at the local level. This may be because, to some extent, local-branch representatives are mainly concerned with limiting the negative effects of changes at the local level, particularly the potential loss of jobs.

Trade union support — Box 17

The U.K. Trade Union Congress, concerned that school-industry links tend to neglect the role and work of unions,

- has published guidelines on work experience for school pupils (this is found in many other countries also);
- has produced "role play" materials for primary schools about an industrial conflict situation;
- has published a booklet for teachers about trade unions to help guide work in school, e.g. on mini-enterprises;
- encourages the twinning of schools with local union branches.

Source: TUC information material

Finding more placements

Finding enough work experience placements had become a problem in a number of countries. On the one hand, there are more and more schemes, not confined to students in vocational training, but for students in general education and compulsory education also. On the other hand,

the economic recession has made it much more difficult to find places. At the same time newly-introduced special measures for youth training, sometimes offering financial incentives to employers to accept trainees, has brought about quite fierce competition on the work experience placement market, in some places.

In most pilot projects, finding work experience opportunities for students is a job for the teachers. If places are scarce, this can be difficult for them. Among the ways which projects have coped with this problem are:

Student search

The students themselves look for their own work experience places, an approach which has been very successful in some projects. It works best when there are small firms available, in the locality, which are easier for students to approach, sometimes with the help of their parents. Some pilot projects have made the search process a recognised part of the learning experience, finding that it is a useful stimulus to learning communication skills and promoting self-confidence.

Local co-ordinating agencies

The agencies described in the previous section obviously have a role, where they exist. In Modena, the school-work-agency, working jointly with other services in the city, found 325 work placements for students taking part in a summer holiday work experience scheme. The Rijnmond project (NL 25) found more than 800 placements for a new guidance curriculum. These and other projects have found that a 3-step strategy works best:

- send the firm introductory information;
- telephone the firm and discuss the request;
- visit the manager.

The Rijnmond project even produced a 10-minute video to introduce their programme to the firm, and found it a very effective means of encouraging them to co-operate.

On the whole, big firms find it easier to co-operate with a co-ordinating agency, because they find that it saves them time and they do not have to handle a lot of individual requests. On the other hand, where firms are smaller, they may find it easier to have direct contacts with the schools, in a more informal way. In areas with firms of different kinds and sizes, a mixture of both approaches may be quite workable, but with some supervisory, and overall co-ordinating role being exercised by the agency in the area. The developmental and co-ordinating potential of agencies should not be under-estimated; if there is a shortage of places, agencies may be able to play an important part in persuading large firms to assist; they may also be able to help schools to organise their use of placements in a more effective way, even using the same placement in a firm more than once during a school year.

Where can extra work experience places be found? Box 18

In firms with less than 100 employees in the technical and agricultural sectors. That is one of the answers which came out of a 1984 survey of 1,964 firms in the Netherlands.

Some other results of this survey:

- only 20% of all Dutch firms take part in work experience schemes: 82% of the big firms (100+ employees); 52% of the medium-sized (21-100); 29% of the small (6-20) and 17% of the very small (1-5) ones.
- in the last 4 years only 40% of small firms had been asked to participate, but 85% of the bigger ones.
- 40% of the firms who had not been asked said that they were willing to participate; they were mainly in agriculture, education and the small industry sector;
- big firms were being overwhelmed with requests for placements. Dealing with them often cost 10-20% of the work-time of a member of staff. These firms favoured a more centralised procedure.

5. Support for teachers

Introducing and running a work experience scheme makes new demands on the teachers concerned. What these will be depends on the context; teachers in vocational schools, drawing on practical examples from work experience to illustrate lessons on theory, clearly need to be informed about developments in the industry which their students are visiting; but for other forms and uses of work experience in compulsory schooling, the kinds of knowledge, skills and attitudes which teachers will need to develop in order to run a scheme successfully will be quite varied. Some teachers may find themselves dealing with people and institutions outside the school with whom they have never been in contact before; others may want to help students to reflect on, and interpret, their experiences in their placement, and find it difficult to do so without having some more personal knowledge of the world of work themselves; others may be called on to interact with their students in a more adult relationship than before, and need help in adjusting to this.

Work experience - new demands on teachers — Box 19

Attitudes
- greater awareness of current developments in the economic world;
- greater awareness of the potential contribution of work experience as part of the curriculum.

Knowledge
- about the social and economic world outside the school;
- about new types of work, jobs, processes and developments in the organisational structure of the world of work;
- about how to organise and run schemes such as mini-enterprises, in schools.

Skills
- negotiating and public relations skills, to deal with firms, etc;
- teaching skills e.g. for helping students doing project work and in individualised learning and for creating new learning situations.

The pilot projects have taken these demands seriously, and developed a range of different kinds of experience and training to help teachers meet them. Box 19 summarises the three main areas of need, relating to new attitudes, knowledge and new skills, which training or staff development was designed to help.

The kinds of professional skills called for in teachers to handle work experience successfully overlap, naturally, with the skills needed to handle the other kinds of change taking place in pilot project schools in the Programme, such as towards more practical learning, more activity-based courses, and so on. But some training activities have been specifically related to work experience.

The commonest reponse, which can be seen in pilot projects in Belgium, Germany, Greece, Italy, the Netherlands, and the United Kingdom, is to provide some work experience for teachers themselves. Such schemes have varied enormously in length, from a few days (in most countries) to as long as 6 months (for a few selected teachers, e.g. in the United Kingdom).

The Zeeland project (NL 24) is a good illustration of a short work experience scheme for teachers. It organises 3-day visits for teachers of guidance and practical subjects to companies and other institutions, and between 1983 and 1985 nearly 600 teachers took part (out of a total of 850 such teachers in the Province). Over 90% found the experience instructive, and 75% said that they learned something about recent developments in industry as well as about their own subjects. They found that they could use the information they had learned in their own teaching, and nearly half said that they often used examples from work experience.

In Italy, the Modena project (I 22a) also organised 2-day stays in firms for teachers. But more widespread in Italy is the practice of organising short seminars, lasting 2 or 3 days, at which representatives from firms, economists from universities, and representatives of other bodies such as the local Chambers of Commerce, discuss recent developments in, and the prospects for, local industries in the re-

gion, and job opportunities, in relation to the economy of the area in which the teachers are working. Such seminars have been a feature of all the Italian projects, and similar arrangements have been made in Greece, as part of the special 5-month training courses for teachers of guidance, to intensify their knowledge of, and contact with, firms and institutions in the area of their own schools (though guidance in Greek schools does not normally include any work experience element).

In France, many teachers in the pilot project examining ways to improve the effectiveness of work experience (F 9) were able to visit their students during their placement, and this was helpful.

Among the problems which projects have faced, arranging this kind of training activity are:

- timing; in the Netherlands scheme, teachers attend the courses during school-time. The placements are generally organised just before the summer holidays, when some examination classes are already out of school so that the organisation problem is less.

- assessing effectiveness; as the Netherlands scheme suggests, the results of teachers visiting firms appear to be positive. However, some take the view that it is more important for teachers to be better informed about the choice and availability of forms of further education and training, relevant to the future career choices of their pupils, than to concern themselves too closely with the world of work. Both views are reflected in the projects.

- industrial tutors; the staff responsible in the firm for supervising the student attending it on a placement should, if possible, be associated with the courses for teachers. In practice it has been very difficult to achieve this, since firms find it hard to spare time, particularly to release their staff for training activities of this kind. But the role of the industrial tutor, in supervising the student, is of great importance, and deserves more attention.

6. Conclusions

A great diversity of ways of using work experience have been reviewed here. They reflect the varying history of its use, in different countries, and the different forms of the organisation of secondary education in Community countries.

It is not likely that any single pattern of the use of work experience will predominate in the future, or that any one particular form of its use will be found to be more effective or preferable to others. Wider use of work experience, nonetheless, seems likely to continue to be the trend, with more and more pupils being offered one or more work experience placements during their time in compulsory education.

The pilot projects have made it clear, however, that, while work experience schemes deserve a place as part of compulsory schooling, they must be supported by effective policies at the national and local level. The following summarise what these policies should cover:

1. Policies, guidance etc. must be prepared by the appropriate authorities, which:

- state the objectives of the use of work experience clearly and in operational terms;
- encourage teachers to exploit the potential of students' work experience in as many subjects in the curriculum as possible;
- encourage a phased, or sequential, approach to the use of work experience as part of guidance or careers education teaching;
- encourage the development of schemes of work experience which draw not only on placements but also the other elements of work experience schemes which have been identified in this paper;
- recognise the importance of proper preparation and follow-up of students' learning activities which take place outside the school.

2. Schools should provide all students with programmes of preparation for adult and working life which include work experience.

The experience of the pilot projects suggests the desirability of offering work experience to all pupils, not just those who are taking vocational, or practical, courses. It also indicates clearly the need to encourage exploration of the possibilities of work experience, including work-shadowing, as a way of extending vocational choice by girls into non-traditional career areas, to help to de-stereotype careers conventionally regarded as "male" and "female".

3. The necessary conditions should be created to support schools' use of work experience schemes.

The pilot projects reflected the importance of:

- outward-looking attitudes on the part of head-teachers, teachers and other staff, and the need for appropriate staff development support for them;
- giving schools the freedom needed to use the resources in their area.

4. Suitable co-ordinating or liaison structures must be set up.

The more widespread work experience schemes become, the more necessary are such structures. A variety of types have been reviewed. The schools' use of work experience can gain much from their support, particularly with regard to the important task of increasing the number of placements available.

ANNEX A

Glossary

1. School-industry conferences. Usually for young people in their last years of compulsory education. Programmes often include briefing talks, group-work, discussions on problems drawn from industry, and case-studies and problem-solving, with the overall aim of explaining the importance and challenges of industry.

2. Role-playing games. Students play roles of managers, workers or trade unionists and in doing so have to solve a problem. Aims can include raising students' awareness of the variety and types of challenge and opportunities presented in the world of industry; and developing their discussion and reporting skills.

Example: a Danish Transition pilot project (DK 3) has produced a booklet in which 24 role-games are described (aims, target group, duration, etc.) and their contributions to guidance are discussed.

3. Simulated business games: are more complex forms of role-play games.

Example: In an 'Istituto Commerciale' (school of commerce), in an Italian pilot project (I 20a), a group of teachers developed 3 business games for vocational training: "Six firms", to simulate business transactions: "International trade" on buying and selling products abroad: and "A firm and its markets" a more complex game on new production technologies and negotiations with trade unions.

4. Mini-enterprises: usually involve a number of students running a small, temporary, business, in which they plan, design, make and sell a product or service. The aims can vary, between education for enterprise, i.e. to enable young people to set up their own business later; education about enterprise, i.e. to gain insight into marketing, financing, business organisation, etc.; and education in enterprise, i.e.

to develop initiative, decision-making skills, etc. (see also "Education for Enterprise; an interim report", Brussels, IFAPLAN, 1986).

Examples: many pilot projects have run mini-enterprises, including B 1, IRL 18, I 20a, I 21b, UK 26, UK 28.

5. Industrial projects. School-industry collaborations of various kinds. Most common between firms and technical and vocational training institutes but, increasingly, with other types of school also (U.K.). Students are given an opportunity to apply their theoretical knowlege to produce a product to specifications, and to learn to work under time pressure.

Example: in the Modena pilot project (I 22a) a group of students from a vocational training institute carried out a quality-control assignment, commissioned by a local public service. In another (commerce) school a student youth cooperative carried out a survey of local firms' future use of mini-computers, for the Chamber of Commerce.

6. Work exploration centre, off-site training workshop. Located off the school premises and providing equipment, space and staff not available in school these centres can serve various purposes:

- as a base for a mini-enterprise (Irish pilot projects IRL 16 & 18);
- to provide "taster" placements (Danish 'Vaerkestedskola' (workshop schools), as in the Aalborg pilot project DK 3);
- to provide job-related training facilities (Germany, generally).

Such centres may also be a response to a shortage of placements in firms; and to the need to share practical facilities and staff between several schools.

7. Use of industrial facilities. Sharing equipment/facilities in a firm, or provided, temporarily or permanently, to the school.

Examples: schools in Belgium (B 1) and Ireland (IRL 17) have received micro-computers from firms and modems to link them with a firm's main-frame computer.

8. Work observation, work shadowing. Studying an occupation by following a particular employee through his/her working-day. Regarded as useful to inform students about jobs which are less characterised by the nature of the tasks done (e.g. meetings, writing reports, making telephone calls) than by the role of the individual, e.g. in managing a firm, preparing a court appearance, visiting a patient, etc.

ANNEX B

List of contacts for Transition pilot projects referred to in the text

B 1 J. Robert, 25 rue Centrale, B - 7050 Maurage-La Louvière. Tel° 32 - 64 - 66 26 14

B 2 Mme A. Machiels, Centre P.M.S., Luikersteenweg 56, B - 3500 Hasselt. Tel° 32 - 11 - 22 17 38

DK 3 H. Bruun, Udskoling- et EF Projekt, Hasserisvej 174, DK - 9000 Aalborg. Tel° 45 - 8 - 11 22 11 ext. 4170.

DK 4 P. Lindholm, Skole- og Fritidsforvaltningen, Hvidovrevej 59a, DK - 2650 Hvidovre. Tel° 45 - 1 - 78 12 11 Ext. 1207 and 1208.

D 7 V. Hopf, Regionales Verbundsystem Kassel, Hauffstrasse 5, D - 3501 Fuldatal 1. Tel° 49 - 561 - 81 81 58.

F 9 P. Chauvet, Direction des Lycées (DLC4), Ministère de l'Education Nationale, 107 rue de Grenelle, F - 75007 Paris. Tel° 33 - 1 - 4550 11 16.

F 11 Mme C. Marlier, Ministère de l'Education nationale, (DLC6) 107 rue de Grenelle, F - 75007 Paris, Tel° 33 - 1 - 4550 10 08

IRL 16 T. Crooks, CDVEC Curriculum Development Unit, 28 Westland Row, Trinity College, IRL - Dublin 2. Tel° 353 - 1 - 60 24 33.

IRL 17 Ms. M. O'Riordan, Curriculum Development Centre, V.E.C., Island House, Cathedral Square, IRL - Galway. Tel° 353 - 91 - 671 94.

IRL 18 J. Gleeson, Curriculum Development Centre, St. Patrick's Comprehensive School, IRL - Shannon, Co. Clare. Tel° 353 - 61 - 61 878.

I 20a G. Italiano, Provveditorato agli studi di Firenze, c/o Liceo Scientifico, "Il Pontormo", Via XX Settembre, 31, I - Empoli (FI). Tel° 39 - 571 - 7 26 73

I 21a A. Maccari, Liceo Scientifico, Via Kennedy 12, I - 31015 Conegliano (TV). Tel° 39 - 438 - 35 944.

I 21b L. Iannuzzi, Provveditorato agli Studi di Avellino, Via de Renzi, I - 83100 Avellino. Tel° 39 - 825 - 25 040.

I 22a E. Ferrari, Provveditorato agli Studi di Modena, Via Rainuso 100, I - 41100 Modena. Tel° 39 - 59 - 335 335.

I 22b N. Panaro, Ufficio Scolastico Regionale del Piemonte, Corso Matteotti, 32a, I - 10121 Torino. Tel° 39 - 11 - 531784

NL 24 Ms. Hinke de Graaf, COA Zeeland, Postbus 2034, NL - 4460 MA Goes. Tel° 31 - 1100 - 305 48.

NL 25 P. Schings, COA Rijndelta, Postbus 21813, NL - 4460 AV Rotterdam. Tel° 31 - 10 - 33 17 44.

UK 26 J. Eaton, TRAWL Project, NICED Information Office, Stranmillis College, Stranmillis Road, G.B. - Belfast BT9 5DY, N. Ireland. Tel° 44 - 232 - 682414.

UK 28 Ms. E. Lennie, Glenwood Secondary School, 147 Castlemilk Drive, GB - Glasgow G45 9UG, Scotland. Tel° 44 - 41 - 634 9367.

This paper is one in a series which is being produced on behalf of the Commission of the European Community on issues related to the Transition of Young People from Education to Working and Adult Life. It was prepared for the Commission by a team employed by IFAPLAN, an applied social research institute, based in Cologne.

English edition : John Banks
DOC: 03WD86EN
Published by Programme Information Office, IFAPLAN,
Square Ambiorix 32, B - 1040 - BRUXELLES.
Printed by Repro 68 Köln, an initiative of handicapped and non-handicapped young people.